

**BOBBY JINDAL**  
GOVERNOR



**HAROLD LEGGETT, PH.D.**  
SECRETARY

**State of Louisiana**  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES

Certified Mail No.

Activity No.: PER20070005  
Agency Interest No. 1138

Mr. John V. Casey  
Operations Manager  
PO Box 228  
Geismar, LA 70734-0228

RE: Part 70 Operating Permit Renewal and Major Modification and Nonattainment New Source Review  
Permit, VCM-E Plant, Westlake Vinyls Co LP, Geismar, Ascension Parish, Louisiana

Dear Mr. Casey:

This is to inform you that the permit renewal and major modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit authorizing Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR). The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the \_\_\_\_\_ of \_\_\_\_\_, 2013, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

Permit No.: 1248-V3

Sincerely,

Cheryl Sonnier Nolan  
Assistant Secretary  
CSN:ALR  
c: EPA Region VI

**AIR PERMIT BRIEFING SHEET  
AIR PERMITS DIVISION  
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**VCM-E Plant  
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Westlake Vinyls Co LP  
Geismar, Ascension Parish, Louisiana**

**I. Background**

Borden Chemical and Plastics operated a chemicals manufacturing complex in Geismar, Louisiana. The complex included a Vinyl Chloride Monomer – Acetylene (VCM-A) plant, a Vinyl Chloride Monomer – Ethylene (VCM-E), and a Polyvinyl Chloride (PVC) plant. Geismar Vinyls Company, L.P. (GVC) bought sections of the plant including the VCM-E and PVC plants on December 20, 2002. On June 28, 2005, GVC officially changed its name to Westlake Vinyls Company, L.P.

The VCM complex was originally authorized for construction and operation under Permit No. 400 issued on December 17, 1974. This permit included emissions for the ethylene dichloride (EDC) oxychlorination and EDC cracking processes, including the incinerator scrubber, Emission Point 74-06.

On September 25, 1979, Permit No. 1248 was issued to Borden Chemicals and Plastics for an expansion of the vinyl chloride plant. The expansion included modification of the existing EDC cracking furnace and installation of a vent recovery system on the storage tanks.

Also on September 25, 1979, Borden received Permit No. 1247 for the construction and operation of a polyvinyl chloride plant. This permit superseded Permit No. 889, issued on February 28, 1978, for the production of PVC.

On October 17, 1980, Borden submitted a notification of design changes to both Permit No. 1247 and 1248. The design changes included a proposal for installation of a system to process chlorinated organic intermediate materials for anhydrous hydrogen chloride production. These changes, not requiring amendments to the existing air permits, were approved in letter from LDNR dated November 10, 1980. A second stage caustic scrubber was added (per temporary permit variance issued July 17, 1992) to reduce chlorine emissions to within proposed permit limit. A condition of this variance required submittal of a permit modification application before December 20, 1992.

Permit No. 2302, issued March 9, 1995, consolidated VCM-A and VCM-E plants, Permit No. 1248, and the Polyvinyl Chloride (PVC) Plant, Permit No. 1247. An Administrative Amendment was issued on July 26, 2005 for adding the HCl Scrubber (EPN 95-42) and HCl Loading (EPN 03-05). Also, another one was issued on October 12, 2005 to change the potential operating rate for the VCM-Plant Vent Incinerator Scrubber (EPN 74-06). VCM-E Plant was operating under Permit No. 1248-V0 dated July 6, 2004 and then Permit No. 1248-V1 dated January 25, 2007. Currently the VCM-E Plant was operating under Permit No. 1248-V2 dated September 5, 2007.

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This is the Part 70 operating permit for the facility.

**II. Origin**

A permit application and Emission Inventory Questionnaire were submitted by Westlake Vinyls Co LP on December 14, 2007 requesting a Part 70 operating permit modification and an initial PSD permit, along with supplemental information dated April 10, 2008, May 8, 2008 and May 22, 2008.

**III. Description**

The VCM-E (Vinyl Chloride Monomer via Ethylene) plant is actually made up of three separate operating units. Two of the units produce ethylene dichloride (EDC) and one produces vinyl chloride monomer (VCM). These units are referred to as the direct chlorination unit and the oxychlorination unit (to make EDC), and the vinyl chloride unit (for VCM).

In the EDC direct chlorination unit, ethylene and chlorine are reacted in the liquid phase to form crude ethylene dichloride. The crude EDC is mixed with recycled EDC from the vinyl chloride unit and is then processed in a portion of this unit referred to as the EDC purification section. The first part of the EDC purification section is concerned with water washing and neutralization of the crude EDC. Next the neutralized EDC is fractionally distilled to the first remove low boiling impurities plus water and then to remove high boiling impurities.

Presently in the oxychlorination unit, HCl, oxygen, and ethylene are combined to form EDC and water. The EDC produced in this unit is sent to the EDC purification section previously mentioned where it is neutralized and then purified by fractional distillation. The water produced in the oxychlorinated reaction is used as the washing agent for the water washing operation in the EDC purification section. The wash water is combined with the caustic soda solution from the EDC neutralization process. The combined aqueous stream is steam stripped and finally discharged through the biological wastewater treatment with downstream air stripping prior to discharge via an NPDES permitted outfall.

Purified, anhydrous EDC is either further processed to manufacture vinyl chloride or stored as a product for sale. The material that is further processed is thermally dehydrogenated (cracked) in the vinyl chloride unit to form hydrogen chloride (HCl) and VCM. About 50-60% of the EDC fed to the EDC cracking furnace is cracked. In the purification section of the vinyl chloride unit, the HCl is isolated and recycled to the oxychlorination unit. The vinyl chloride product is purified and sent to storage.

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Process Vents from the EDC and VCM-E units are sent to the incinerator for destruction of organic compounds. The gas from the incinerator is then sent through a quench scrubber and a caustic scrubber to remove HCl before the gas is released to the atmosphere. If the primary incinerator goes off line for any reason, the secondary incinerator will immediately go into service to prevent release of untreated process vents to the atmosphere.

This modification is for the following changes for the VCM-E Plant:

1. Adding a new primary incinerator, EQT0126;
2. Replacing the existing secondary incinerator with the existing primary incinerator, EQT0127; and
3. Correction of specific requirements in the current permit.

The combined firing rate of the new primary incinerator with the existing primary incinerator will be increased to a total of 100 MMBtu/hr; whereas the combined firing rate is currently permitted at 67.7 MMBtu/hr. The new primary incinerator will use state-of-art technology including specially designed burner tips and will enhance the quality of products (VCM, HCl, and EDC) by ensuring continuous availability of an incinerator to control vent gas emissions.

The increase in NOx emissions related to the project triggers PSD and Non-Attainment New Source Review (NNSR).

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM <sub>10</sub>	71.83	71.77	-0.06
SO <sub>2</sub>	0.37	0.36	-0.01
NO <sub>x</sub>	53.23	140.05	+86.82
CO	54.72	84.91	+30.19
VOC *	56.78	58.33	+1.55

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**VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
Benzene	<0.01	<0.01	-
Bromoform	0.86	0.86	-
Carbon tetrachloride	1.20	1.20	-
Chlorobenzene	<0.01	<0.01	-
Chloroethane	0.55	0.55	-
Chloroform	13.26	13.06	-0.20
1,2-Dichloroethane	19.19	18.99	-0.20
1,2-Dichloroethylene	0.06	0.06	-
1,2-Dichloropropane	<0.01	<0.01	-
Ethyl benzene	<0.01	<0.01	-
Methyl Chloride (Chloromethane)	<0.01	<0.01	-
1,1,2,2-Tetrachloroethane	1.52	1.52	-
Tetrachloroethylene	<0.01	<0.01	-
1,1,2-Trichloroethane	0.85	0.85	-
Trichloroethylene	0.02	0.02	-
Toluene	0.02	0.02	-
Vinyl Chloride	9.81	9.63	-0.18
Total	47.34	46.76	-0.58

**Other VOC (TPY):** 11.57

**Non – VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
Chlorine	18.04	18.04	-
Dichloromethane	<0.01	<0.01	-
Hydrogen Chloride	10.99	10.99	-
Sulfuric Acid	<0.01	<0.01	-
Total	29.03	29.03	-

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Estimated actual emission increases due to the project in tons per year are as follows:

Pollutant	Contemporaneous Increase	Project Increase	Net Change	PSD/ NNSR Threshold	NSR Review Required
PM <sub>10</sub>	-	+ 0.92	+ 0.92	15 / NA	No
SO <sub>2</sub>	-	+ 0.07	+ 0.07	40 / NA	No
NO <sub>x</sub>	16.40	+ 99.80	+116.20	40 / 25	Yes
CO	-	+ 41.08	+ 41.08	100 / NA	No
VOC	-	+ 11.40	+ 11.40	NA / 25	No

Prevention of Significant Deterioration (PSD) review is required for this project, which results in a significant increase in emissions of a regulated pollutant.

PSD is part of the federal New Source Review (NSR) permitting program for pollutants. Westlake Vinyls Company, L.P. (WVC) VCM-E plant is categorized as one of the 28 sources listed in Section 169 of the Clean Air Act. VCM-E is a major source under PSD. A netting analysis is required for NO<sub>x</sub> which will increase more than the PSD significance level.

The VCM-E Plant is located in Ascension parish, which is part of a nonattainment area for ozone. On June 15, 2005, the EPA revoked the 1-hour ozone ambient air quality standards and the Baton Rouge Nonattainment Area was reclassified as marginal for ozone precursors (NO<sub>x</sub> and VOC) under the new 8-hour ozone standard. However, on October 3, 2007, the EPA issued a memorandum summarizing the implications of a December 22, 2006 U.S. Court of Appeals for the District of Columbia Circuit decision (South Coast v. EPA). In effect, the court's decision restores applicability thresholds and emission offsets held for nonattainment area classifications under the 1-hour ozone standard. EPA stated that it intends to undertake rulemaking to conform to the court's decision.

In accordance with PSD regulations (LAC 33:III.509), the net emission increase is determined by summing all project-related emission increases plus any other creditable emission increases and/or decreases that are contemporaneous with the project. If the net emission increase is greater than NO<sub>x</sub>'s PSD threshold of 40 tpy, then NO<sub>x</sub> is considered to have a significant net emission increase and is subject to PSD review.

For NNSR, per LAC 33.III.504, the net emission increase will be determined by summing all project-related emission increases plus any other creditable emission increases and/or

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decreases "over a period including the calendar year of the proposed increase, up to the date on which the proposed increase will occur, and the proceeding four consecutive calendar years" (i.e. 2003 to 2008 for this project). If the net emission increase is greater than the NO<sub>x</sub>'s NNSR threshold of 25 tpy, then a significant net emission increase results and NO<sub>x</sub> is subject to NNSR review. Based on permitting actions performed over the timeframes outlined above, the table below presents the creditable NO<sub>x</sub> emission increases and decreases for this analysis.

<b>Contemporaneous Changes</b>		
<b>Emission Source</b>	<b>Permitting Action and Emission Basis</b>	<b>Emissions (tpy)</b>
Chlor-Alkali Steam Boiler (Chlor-Alkali Plant)	New Source; Potential to emit from 3/2007 air permit application and current air permit	19.71
Existing Secondary Incinerator (VCM-E Plant)	Removal of Source; Based on 4/2005 through 3/2007 natural gas data	-3.31
<b>Creditable NO<sub>x</sub> Emission Increases</b>		<b>16.40</b>

The currently permitted allowable emissions for the Indeck Steam Boiler (Utilities Plant) and the Chlor-Alkali Steam Boiler (future Chlor-Alkali Plant) were used in the calculation of creditable NO<sub>x</sub> emissions because both of these sources did not exist at the beginning of the PSD and NNSR contemporaneous timelines. For the existing secondary incinerator at the VCM-E Plant, the NO<sub>x</sub> emission decrease corresponding to its removal as part of this project was estimated based on the natural gas supplied to it during the 24-month consecutive period of April 2005 through March 2007.

Summing the NO<sub>x</sub> project-related emission increase of 99.80 tpy and the contemporaneous increase of 16.40 tpy results in a net NO<sub>x</sub> emission increase of 116.20 tpy. Because this value is greater than its PSD and NNSR significance levels of 40 tpy and 25 tpy, respectively, NO<sub>x</sub> is classified as having a significant net emission increase.

This NSR applicability analysis results in NO<sub>x</sub> having both a significant emission increase and a significant net emission increase. Therefore, NO<sub>x</sub> is subject to both PSD and NNSR review as part of this permitting action. Best Available Control Technology (BACT) and LAER are required for this project. Since LAER is more stringent than BACT, this technology shall satisfy BACT requirements.

#### **IV. Type of Review**

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, Nonattainment New Source Review (NNSR) and Prevention of Significant

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Deterioration (PSD). PSD is required for NO<sub>x</sub> emissions, which will be permitted under PSD-LA-734. New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do apply.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

**LAER Analysis for NO<sub>x</sub>**

For the proposed new primary incinerator, the regulated pollutant emitted in excess of the significant emission rate is NO<sub>x</sub>. To identify process and/or add-on control alternatives potentially applicable to the incinerator, the Reasonable Available Control Technology (RACT)/BACT/Lowest Achievable Emission Rate (LAER) Clearinghouse was reviewed. The New and Emerging Environmental Technologies (NEET) database was also reviewed. The technologies identified for incinerators and thermal oxidizers are listed below in order from most to least stringent.

- Selective Catalytic Reduction
- Selective Non-Catalytic Reduction
- Flue Gas Recirculation
- Low NO<sub>x</sub> Burners
- Good Combustion Practices

The Louisiana state implementation plan (SIP) was reviewed as well as the SIP's from several other states with similar categories of major sources. The review included SIP's from the South Coast Air Management District in California and the Houston area in Texas. None of these documents include regulations which are applicable to incinerators or thermal oxidizers.

Each technology was then evaluated for technical feasibility. This evaluation is discussed in detail for each technology.

**Selective Catalytic Reduction**

Selective catalytic reduction (SCR) is used on fossil fuel fired sources to reduce NO<sub>x</sub> emissions. Only one incinerator in chlorinated waste gas vents service was found in the Clearinghouse search that has proposed SCR technology for NO<sub>x</sub> control. SCR is a post-combustion gas treatment applied to reduce NO<sub>x</sub> to nitrogen, water, and oxygen. Ammonia is injected into the gas stream near the economizer and upstream of the catalyst bed. The catalyst lowers the activation energy of the NO<sub>x</sub> decomposition reaction. An ammonium salt intermediate is formed at the catalyst surface and subsequently decomposes to nitrogen and water. SCR

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systems typically have a NO<sub>x</sub> control efficiency of 70% to 90% for fossil fuel utility boilers. SCR systems operate in a temperature range of 500° to 1100° F.

SCR system performance is affected by reaction temperature range, residence time, amount of ammonia slip, particulate matter in the gas stream, catalyst activity, pressure drop across the catalyst deactivation.

In the WVC application, the chlorinated vent gases are burned in the incinerator. The vent gases exiting the incinerator are then cooled to 500° F in the boiler. The gases then pass through a quench absorber to remove the majority of the hydrogen chloride (HCl). A caustic scrubber removes most of the remaining HCl. These processes lower the temperature of the gas to approximately 155° F. SCR systems are typically installed at the exit of the combustion equipment to meet the required operating temperature for optimum catalyst activity. In this application, a SCR system cannot be installed at the exit of the WVC incinerator and upstream of the HCl removal systems for two reasons. Chlorine is a known catalyst poison; the chlorine in the stream will significantly reduce the active life of the catalyst. The chlorine will react with the ammonia which is injected into the gas stream to produce ammonia chloride. This will interfere with the NO<sub>x</sub> reduction thereby reducing the effectiveness of the system.

If a SCR system were to be installed downstream of the caustic scrubber after the majority of the chlorine in the stream has been removed, the gas would have to be reheated back up to optimum reaction temperature. This would require a gas fired heater which would itself generate combustion emissions including NO<sub>x</sub> while using additional energy in the form of natural gas. Also, the incinerator area at the WVC site has limited available space. SCR systems are large and thus the SCR would have to be installed in another area of the facility. This would require fans and ductwork to move the gas to the SCR unit with the accompanying heat loss. Thus, additional energy would be required to get the gas to the SCR system at the appropriate temperature. Additionally, all SCR systems have some ammonia emissions; ammonia is a Louisiana Toxic Air Pollutant. In conclusion, WVC does not consider the SCR system to be technically feasible for the WVC incinerator. No SCR system is presently operating in chlorinated vents service. Additionally, a SCR system for the WVC site would require additional energy use and would generate additional emissions of both criteria and toxic pollutants. Installation of an SCR for further treatment of the waste gas stream would result in an increase in NO<sub>x</sub> emissions by 8.5 tpy in addition to the proposed permit.

Selective Non-Catalytic Reduction

Selective Non-Catalytic Reduction (SNCR) is also used on fossil fuel fired sources to reduce NO<sub>x</sub>-emissions. SNCR-systems inject ammonia or urea directly into the firebox of the unit

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to react with the NO<sub>x</sub> formed in the combustion process. The resulting product of the chemical reaction is elemental nitrogen, carbon dioxide, and water. This reaction requires a temperature of 1600° F to 2100° F. As with the SCR system, the chlorine will react with the ammonia which is injected into the gas stream to produce ammonia chloride. This will interfere with the NO<sub>x</sub> reduction thereby reducing the effectiveness of the system. Additionally, the SNCR system requires even higher temperatures than the SCR system for NO<sub>x</sub> reduction. Thus, the SNCR system is not technically feasible for the same reasons as discussed for the SCR technology.

**Flue Gas Recirculation**

Flue gas recirculation (FGR) reduces the temperature in the flame zone by diluting the oxygen content of the combustion air and by causing heat to be diluted in a greater mass of flue gas. This reduction in temperature lowers the NO<sub>x</sub> generation. Typical reductions in NO<sub>x</sub> are 40 to 50%. However, in the incinerator, high temperatures are necessary to completely oxidize the chlorinated organic chemicals in the waste gas stream. Additionally, the presence of chlorine and HCl creates a very corrosive environment in the recirculated flue gas ductwork. Thus, FGR is not technically feasible in chlorinated waste gas service.

**Low NO<sub>x</sub> Burners**

Low NO<sub>x</sub> burners reduce NO<sub>x</sub> formation by controlling the mixing of the fuel and combustion air to create chemical reaction zones within the flame. Low NO<sub>x</sub> burners typically reduce NO<sub>x</sub> emissions by 30 to 65%. In the WVC application, there are wide variations in the composition and the flow rate of the two waste streams to be combusted. A traditional staged air or staged fuel gas burner will not work to completely combust the hydrocarbon in the waste stream. Additionally, with the wide variation in the composition of waste gas, these traditional burners will not operate in a stable fashion. The burner on the new incinerator has been designed to produce the lowest NO<sub>x</sub> possible for this system and is considered as LAER. The NO<sub>x</sub> emissions are estimated to be 0.2 lb/MMBtu when firing natural gas and 0.3 lb/MMBtu when firing waste gas.

**Good Combustion Practices**

Good combustion practices reduce NO<sub>x</sub> by ensuring that the incinerator is operating within the designed operating range. One important parameter is excess air. By optimizing the amount of air used for combustion, complete oxidation of the waste streams is assured while minimizing the production of NO<sub>x</sub>. Excess air is also optimized by employing divided air streams on the burner to provide air combustion and flame/firebox coolant. WVC closely

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monitors stack gas oxygen to insure that minimal amounts of excess air are added to the combustion process. Another practice which minimizes NO<sub>x</sub> production is to not preheat the incoming air. This lowers NO<sub>x</sub> formation by lowering the combustion temperature. WVC does not preheat the incoming air. WVC also provides all operators working on the incinerator with proper training and maintains detailed operating procedures for the incinerator. Additionally, the equipment is maintained following a preventative maintenance schedule to ensure instrumentation and controls are operating properly.

This permit modification will result in a projected increase of 99.8 tons of NO<sub>x</sub>. To meet the requirements of LAC 33:III.504.M.3, the 99.8 ton NO<sub>x</sub> project increase will be offset at a 1.3 to 1.0 ratio with 54.38 tons of Ozone Season NO<sub>x</sub> credits and 75.36 tons of non-Ozone season NO<sub>x</sub> credits. These Emission Reduction Credits (ERCs) were generated by the permanent shutdown of the Cogen II unit in November 2004.

The permanent shutdown of the Cogen II Unit generated 86.46 tons of Ozone Season NO<sub>x</sub> credits and 186.33 tons of non-Ozone season NO<sub>x</sub> credits. The projected offset increase will leave a remaining balance of 32.08 tons of Ozone Season NO<sub>x</sub> credits and 110.97 tons of non-Ozone season NO<sub>x</sub> credits.

**V. Credible Evidence**

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

**VI. Public Notice**

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 200X; and in the <local paper>, <local town>, on <date>, 200X. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental

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Services Public Notice Mailing List on <date>. The draft permit was also submitted to US EPA Region VI on <date>. All comments will be considered prior to the final permit decision.

**VII. Effects on Ambient Air**

Dispersion Model(s) Used: AERMOD

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
NOx	Annual	85.97	100

**VIII. General Condition XVII Activities**

Work Activity	Schedule	Emission Rates – tons				
		PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Routine Flaring Maintenance	4 flarings/year	0.023	0.002	0.302	0.254	1.48
Sampling Procedures	1470 sample/month					2.20
Pump Preparation	20 pumps/year					<0.01
Line Preparation	10 pipe sections/year					<0.01
Vessel Preparation	130 vessels/year					0.07
Instrumentation Mechanical Work	120 instruments /year					0.04
Tank Cleaning for Inspection/Service	1 tank / year					2.30
Frac Tanks	40 frac tanks/year					0.10

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**IX. Insignificant Activities**

<u>ID No.:</u>	<u>Description</u>	<u>Citation</u>
-	Antifoulant Tote (250 gal)	LAC 33:III.501.B.5.A.2
-	Lube Oil Console No. 1 (250 gal)	LAC 33:III.501.B.5.A.2
-	Lube Oil Console No. 2 (250 gal)	LAC 33:III.501.B.5.A.2
-	Tank 7102 (1000 gal)	LAC 33:III.501.B.5.A.3
-	Tank 7201A (1800 gal)	LAC 33:III.501.B.5.A.3
-	Lube Oil Tank (2,200 gal)	LAC 33:III.501.B.5.A.3
-	Empty Drum Washing	LAC 33:III.501.B.5.A.7
-	Process Vent Analyzers	LAC 33:III.501.B.5.A.9
-	Catalyst Charging operations	LAC 33:III.501.B.5.A.11

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.Chapter																
		5▲	9	11	13	15	2103	2113	2115	2121	2122	2147	2153	22	29*	51*	56	59*
UNF0002	Facility Wide		1	1	1	1									1	1	1	1
EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber		1	1	3	1		3							3	3		1
EQT0016	74-07 VCM Plant - EDC Cracking Furnace		1	1	3										2		1	
EQT0017	74-09 VCM Plant - Decoking of EDC Cracking Furnace		1	1														
FUG0002	79-08 VCM Plant - Fugitives													3	2			
EQT0093	83-01 VCM Plant - HCl Vent Tank Scrubber									2					2			1
EQT0018	95-30 VCM Plant Cooling Tower				1													1
EQT0094	95-31 VCM Plant Cooling Tower				1													1
EQT0019	95-32 VCM Plant Sumps													2				1
EQT0020	95-43 VCM Wastewater Tank 8640																	
EQT0021	95-44 VCM Wastewater Tank 8649A																	
EQT0022	95-45 VCM Wastewater Tank 8649B																	
EQT0024	98-10 VCM Plant - C12 Destruct Cooling Tower						1											1
EQT0012	00-05 VCM Plant Cooling Tower pH Control Tank																	
EQT0013	00-06 VCM Plant Sludge Reactor TK-8619																	
EQT0014	00-07 VCM Plant pH Adjustment Tank, TK-8613																	
EQT0095	06-01 VCM Plant - EDC Cooling Tower							1										1
EQT0096	06-02 Sulfuric Acid Tote Tanks													2				

\* The regulations indicated above are State Only regulations.

▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Westlake Vinyls Co LP  
Agency Interest No.: 1138  
Westlake Vinyls Co LP  
Geismar, Ascension Parish, Louisiana

**KEY TO MATRIX**

- 1 -The regulations have applicable requirements that apply to this particular emission source.  
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

## LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS				40 CFR 61				40 CFR 63 NESHAP				40 CFR			
		A	Db	Kb	VV	III	NNN	RRR	A	F	V	FF	A	F	G	H	Q
UNF0002	Facility Wide	1				1	1	1	1	1	1	1	1	1	1	1	1
EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber		3	2								2					1
EQT0016	74-07 VCM Plant - EDC Cracking Furnace							3									1
EQT0017	74-09 VCM Plant - Decoking of EDC Cracking Furnace																
FUG0002	79-08 VCM Plant - Fugitives					2					3	3					1
EQT0093	83-01 VCM Plant - HCl Vent Tank Scrubber								2				1				
EQT0018	95-30 VCM Plant Cooling Tower												1		1		3
EQT0094	95-31 VCM Plant Cooling Tower												1				3
EQT0019	95-32 VCM Plant Sumps								2				1	2			
EQT0020	95-43 VCM Wastewater Tank 8640					2							2				
EQT0021	95-44 VCM Wastewater Tank 8649A												2				
EQT0022	95-45 VCM Wastewater Tank 8649B					2							2				
EQT0024	98-10 VCM Plant - Cl2 Duct Cool Tower												1				3
EQT0012	00-05 VCM Plant Cooling Tower pH Control Tank					2							2				
EQT0013	00-06 VCM Plant Sludge Reactor TK-8619												2				
EQT0014	00-07 VCM Plant pH Adjustment Tank, TK-8613					2							2				
EQT0095	06-01 VCM Plant - EDC Cooling Tower											1		1		3	
EQT0096	06-02 Sulfuric Acid Tote Tanks					2							2				

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• Westlake Vinyls Co LP  
Agency Interest No.: 1138  
Westlake Vinyls Co LP  
Geismar, Ascension Parish, Louisiana

**KEY TO MATRIX**

- 1 -The regulations have applicable requirements that apply to this particular emission source.  
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**Geismar, Ascension Parish, Louisiana**

**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Notes
EQT015 – 74-06 VCM Plant – Vent Incinerator Scrubber	LAC 33:III.1503 – EXEMPT – Comply with the emission limitations of LAC 33:III.1503.C and the recordkeeping and reporting requirements of LAC 33:III.1513.	NOT APPLICABLE – The vent incinerators combined emit less than 100 TPY SO <sub>2</sub> .
	Chapter 22. Control of emissions of Nitrogen Oxides – Vent incinerators are exempt from this regulation per LAC 33:III.2122.C.7.	NOT APPLICABLE
	NSPS Subpart Db – 40 CFR 60.40b Applies to steam generating unit that has a heat input capacity from fuels combusted in the steam-generating unit of greater than 29 MW (100 million Btu/hour). Heat input is 50 MMBtu/hr.	NOT APPLICABLE
EQT015 – 74-06 Vent Incinerator Scrubber Process Vents	LAC 33:III.2115 – Waste gas stream containing VOCs from any emission source are to be controlled. This Section does not apply to waste gas streams that must comply with a control requirement specified in another selection of this Chapter. HON applies and therefore supersedes this requirement.	NOT APPLICABLE
	LAC 33:III.2147 – Vents from SOCMII process reactors and distillation operations must be controlled. Per LAC 33:III.2147.A.2.g, this requirement is superseded by the HON rule.	NOT APPLICABLE
	NESHAP Subpart F – Applies to Ethylene dichloride and vinyl chloride facilities. Per 40 CFR 63.110(f) a Group 1 Process Stream subject 40 CFR 61 Subpart F shall comply only with the provisions of the HON.	EXEMPT. All VCM-E process vents are considered Group 1
Storage Tanks E- 7113A, TK-7412A, TK-7609 A/B, TK- 7611A/B, TK- 7613A, TK-7601A- D, TK7604A-C	40 CFR 60.110b NSPS Subpart Kb – EXEMPT. Applies to storage vessels, constructed after 1984 that are greater than 40 m <sup>3</sup> (10,000 gal). Per 40 CFR 63.11(b)(1), a Group 1 or Group 2 storage vessel that is also subject to the provisions of 40 CFR 60 Subpart Kb is required to comply only with the provisions of the HON rule.	EXEMPT
EQT016 – 74-07 EDC Cracking Furnace	LAC 33:III.1503 – EXEMPT – Comply with the emission limitations of LAC 33:III.1503.C and recordkeeping and reporting requirements of LAC 33:III.1513	EXEMPT. The cracking furnace emits less than 100 TPY SO <sub>2</sub> ,
	LAC 33:III.2147 – Vents from SOCMII process reactors and distillation operations must be controlled. Per LAC 33:III. 2147.A.2.g, this requirement is superseded by the HON rule.	EXEMPT. Superseded by the HON rule.

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Notes
EQT016 – 74-07 EDC Cracking Furnace (cont.)	40 CFR 60.700 NSPS Subpart RRR – The provisions of this subpart apply to each affected facility that produces any of a specified list of chemicals (including EDC) as a product, co-product, by-product, or intermediate. Per 40 CFR 63.110(d)(8), a unit subject to NSPS RRR and the HON rule is required to comply only with the provisions of the HON.	NOT APPLICABLE. EDC Cracking Furnace has no process vents, and recovery and distillation columns downstream are treated as Group 1 Streams.
FUG002 – 79-08 VCM Plant - Fugitives	LAC 33:III.2121 – DOES NOT APPLY – Process units to which LAC 33:III.2122 apply are not required to comply with the provisions of LAC 33:III.2121	NOT APPLICABLE
	LAC 33:III.2122 – EXEMPT – Per LAC 33:III.2122.A.6 the facility is exempt by requesting exemption from the Agency and complying with more stringent requirements in 40 CFR 61.240-247 (Subpart V)	EXEMPT
	40 CFR 61.65(b)(8) and 61.68 NESHAP Subpart F – Applies to fugitive emission components from ethylene dichloride and vinyl chloride facilities. Facility must operate a reliable and accurate vinyl chloride monitoring system for detection of major leaks and identification of the general area of the plant where a leak is located.	NOT APPLICABLE
	40 CFR 61.240 NESHAP Subpart V – Applies to fugitive emission components from ethylene dichloride and vinyl chloride facilities. Per 40 CFR 63.160(b)(2) equipment to which HON Subpart H applies that are also subject to the provisions of 40 CFR 61 will be required to comply only with the provisions of the HON.	EXEMPT – Facility complies with the HON.
	NSPS 40 CFR 63 Subpart VV – EXEMPT – the facility is exempt by requesting exemption from the agency and complying with more stringent requirements in 40 CFR 63, Subpart H	EXEMPT
EQT093 – 83-01 HCl Emergency Vent Tank	LAC 33:III.2115 – NOT APPLICABLE – Waste gas stream containing VOC's from any emission source are to be controlled. This section does not apply to waste gas streams that must comply with a control requirement specified in another section of this chapter. HON applies and therefore supersedes this requirement.	EXEMPT
	LAC 33:III.2147 – NOT APPLICABLE – Vents from SOCMI process reactors and distillation operations must be controlled.	EXEMPT. Per LAC 33:III.2147.A.2.g, this requirement is superseded by the HON rule.
	40 CFR 61.62 & 61.63 NESHAP Subpart F – NOT APPLICABLE – Applies to Ethylene dichloride and vinyl chloride facilities.	EXEMPT. Per 40 CFR 63.110 (f) a Group 1 Process Stream subject to 40 CFR 61 Subpart F shall comply only with the provisions of the HON.

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Notes
EQT018 - 95:30 & EQT094 - 95:31 Cooling Towers	40 CFR 63.400 – MACT Subpart Q – NOT APPLICABLE – WVC has discontinued use of chromium based water treatment chemicals for industrial process cooling towers.	NOT APPLICABLE
EQT019 – 95:32 Plant Sumps	LAC 33:III.2153 – Owners or operators of affected sources shall comply with control requirements. 40 CFR 61.65(b)(9) NESHAP Subpart F – DOES NOT APPLY. The concentration of VCM in inprocess wastewater shall be no more than 10 ppm before being mixed with any other stream containing less than 10 ppm VCM; before being exposed to the atmosphere, and before being discharged to a wastewater treatment process. Any vinyl chloride removed from the inprocess wastewater is to be ducted through a control system from which the concentration of vinyl chloride in the exhaust gasses does not exceed 10 ppm (average for 3-hour period); or equivalent. 40 CFR 63.132 MACT Subpart G – DOES NOT APPLY – Applies only to process Wastewater streams.	EXEMPT - Superseded by HON rule
EQT020 – 95:43 VCM Wastewater Tank 8640	LAC 33:III.2103 – Applies to storage tanks of organic liquids with specified capacities and vapor pressure.	EXEMPT - No process wastewater streams are routed to the VCM-E plant sumps.
EQT021 – 95:44 VCM Wastewater Tank 8649A	40 CFR 60.110b NSPS Subpart Kb – Applies to storage vessels constructed after 1984 that are greater than 40 m <sup>3</sup> (10,000 gal). Tank does not store organic liquid.	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi. Capacity is 20,000 gallons and VP is 0.72 psi.
EQT022 – 95:45 VCM Wastewater Tank 8649B	40 CFR 60.110b NSPS Subpart Kb – Applies to storage vessels constructed after 1984 that are greater than 40 m <sup>3</sup> (10,000 gal). Tank does not store organic liquid.	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi. Capacity is 20,000 gallons and VP is 0.72 psi.
	40 CFR 63.100 MACT Subpart F – DOES NOT APPLY – Tank does not store organic liquid.	EXEMPT – Tank does not store an organic liquid.
	LAC 33:III.2103 – DOES NOT APPLY – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.
	40 CFR 60.110b NSPS Subpart Kb – Applies to storage vessels constructed after 1984 that are greater than 40 m <sup>3</sup> (10,000 gal). Tank does not store organic liquid.	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.
	40 CFR 63.100 MACT Subpart F – DOES NOT APPLY – Tank does not store organic liquid	EXEMPT – Tank does not store an organic liquid.
	LAC 33:III.2103 – DOES NOT APPLY – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Notes
EQT022 – 95-45 VCM Wastewater Tank 8649B (continued)	40 CFR 60.110b NSPS Subpart Kb – Applies to storage vessels constructed after 1984 that are greater than 40 m <sup>3</sup> (10,000 gal). Tank does not store organic liquid.	EXEMPT – Tank does not store an organic liquid and Capacity is 20,000 gallons and VP is 0.72 psi.
EQT024 – 98-10 VCM Plant – Chlorine Destriuct Cooling Tower	40 CFR 63.100 MACT Subpart F – DOES NOT APPLY – Tank does not store organic liquid  40 CFR 63.400 MACT Subpart Q – NOT APPLICABLE – WVC has discontinued use of chromium based water treatment chemicals for industrial process cooling towers.	EXEMPT – Tank does not store an organic liquid.  NOT APPLICABLE – WVC has discontinued use of chromium based water treatment chemicals for industrial process cooling towers.
EQT012 – 00-05 VCM Plant Cooling tower pH control Tank and EQT096 – 06-02 Sulfuric Acid Tote Tanks	LAC 33:III.2103 – DOES NOT APPLY – Does not contain any VOCs.  40 CFR 60.110b NSPS Subpart Kb – DOES NOT APPLY – Does not contain any VOCs.  40 CFR 63.119 MACT Subpart G – DOES NOT APPLY – Tank has a capacity less than 20,000 gallons and does not store an organic liquid.	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.
EQT013 - 00-06 VCM Plant- Sludge Reactor TK-8619	LAC 33:III.2103 – DOES NOT APPLY – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.  40 CFR 60.110b NSPS Subpart Kb – DOES NOT APPLY – Tank has a capacity less than 20,000 gallons and does not store an organic liquid  40 CFR 63.119 MACT Subpart G – DOES NOT APPLY – Tank has a capacity less than 20,000 gallons and does not store an organic liquid	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.  EXEMPT – Tank does not store an organic liquid and Capacity is 20,000 gallons and VP is 0.72 psi.  EXEMPT – Tank does not store an organic liquid.

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Notes
EQT014 - 00-07 VCM Plant - pH Adjustment Tank TK-8613	LAC 33:III.2103 – DOES NOT APPLY – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.	EXEMPT – Tank does not store an organic liquid and has a capacity less than 40,000 gallons and a vapor pressure less than 1.5 psi.
	40 CFR 60.110b NSPS Subpart Kb – DOES NOT APPLY – Tank has a capacity less than 20,000 gallons and does not store an organic liquid	EXEMPT – Tank does not store an organic liquid and Capacity is 20,000 gallons and VP is 0.72 psi.
EQT095 - 06-02 VCM Plant - EDC Cooling Tower	40 CFR 63.119 MACT Subpart G – DOES NOT APPLY – Tank has a capacity less than 20,000 gallons and does not store an organic liquid	EXEMPT – Tank does not store an organic liquid.
	40 CFR 63.400 MACT Subpart Q – Industrial Processes Cooling Towers	DOES NOT APPLY – WVC has discontinued use of chromium based water treatment chemicals for industrial process cooling towers.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

## 40 CFR PART 70 GENERAL CONDITIONS

- A. The term of this permit shall be five (5) years from date of issuance. An application for a renewal of this 40 CFR Part 70 permit shall be submitted to the administrative authority no later than six months prior to the permit expiration date. Should a complete permit application not be submitted six months prior to the permit expiration date, a facility's right to operate is terminated pursuant to 40 CFR Section 70.7(c)(ii). Operation may continue under the conditions of this permit during the period of the review of the application for renewal. [LAC 33:III.507.E.1, E.3, E.4, reference 40 CFR 70.6(a)(2)]
- B. The conditions of this permit are severable; and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [Reference 40 CFR 70.6(a)(5)]
- C. Permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [LAC 33:III.507.B.2, reference 40 CFR 70.6(a)(6)(i) & (iii)]
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Reference 40 CFR 70.6(a)(6)(ii)]
- E. This permit does not convey any property rights of any sort, or an exclusive privilege. [Reference 40 CFR 70.6(a)(6)(iv)]
- F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information. [LAC 33:III.507.B.2, 517.F, reference 40 CFR 70.6(a)(6)(v)]
- G. Permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR Section 70.6(a)(7). [LAC 33:III.501.C.2, reference 40 CFR 70.6(a)(7)]

## 40 CFR PART 70 GENERAL CONDITIONS

- H. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to perform the following:
1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(i)];
  2. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(ii)];
  3. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iii)]; and
  4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iv)]
- I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and all reports required by the permit.  
[Reference 40 CFR 70.6(a)(3)(ii)(B)]
- J. Records of required monitoring shall include the following:
1. the date, place as defined in the permit, and time of sampling or measurements;
  2. the date(s) analyses were performed;
  3. the company or entity that performed the analyses;
  4. the analytical techniques or methods used;
  5. the results of such analyses; and
  6. the operating conditions as existing at the time of sampling or measurement.
- [Reference 40 CFR 70.6(a)(3)(ii)(A)]
- K. Permittee shall submit at least semiannually, reports of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements, certified by a responsible company official. For previously reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The semiannual reports shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding period encompassing July through December and September 30 for the preceding period encompassing January through June. Any quarterly deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R may be consolidated with the semi-annual reports required by this general condition as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [LAC 33:III.507.H, reference 40 CFR 70.6(a)(3)(iii)(A)]
- L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR Section 70.5 (c) (8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR Section 70.6 (c)(4). [LAC 33:III.507.H.1, reference 40 CFR 70.6(c)(4)]

## 40 CFR PART 70 GENERAL CONDITIONS

- M. Compliance certifications per LAC 33:III.507.H.5 shall be submitted to the Administrator as well as the permitting authority. For previously reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding calendar year. [LAC 33:III.507.H.5, reference 40 CFR 70.6(c)(5)(iv)]
- N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to any emergency or upset provisions in any applicable regulation, notify the permitting authority within 2 working days of the time when emission limitations were exceeded due to the occurrence of an upset. In the event of an upset, as defined under LAC 33:III.507.J, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an emergency occurred and the cause was identified; 2) the permitted facility was being operated properly at the time; and 3) during the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit. [LAC 33:III.507.J.2, reference 40 CFR 70.6(g)(3)(iv) & (i-iii)]
- O. Permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act. [Reference 40 CFR 70.6(a)(4)]
- P. Any permit issued pursuant to 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR Section 70.7(f) or LAC 33:III.529. [LAC 33:III.529.A-B, reference 40 CFR 70.7(f)]
- Q. Permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the following criteria are met:
  - 1. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;
  - 2. increases in permitted emissions will not exceed five tons per year for any regulated pollutant;
  - 3. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III. Chapter 51 or under Section 112 (g) of the Clean Air Act;
  - 4. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment and would not trigger the applicability of any federally applicable requirement;
  - 5. changes in emissions would not qualify as a significant modification; and
  - 6. the request is submitted no later than 12 months after commencing operation. [LAC 33:III.523.A, reference 40 CFR 70.7(d)]

## 40 CFR PART 70 GENERAL CONDITIONS

- R. Permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance, Enforcement Division. All such reports shall be certified by a responsible official in accordance with 40 CFR 70.5(d).
1. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
  2. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
  3. A written report shall be submitted quarterly to address all permit deviations not included in paragraphs 1 or 2 above. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The quarterly deviation reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by Part 70 General Condition K as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. For previously reported permit deviations, in lieu of attaching the individual deviation reports, the quarterly report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any permit deviations occurring during the corresponding specified calendar quarter:
    - a. Report by June 30 to cover January through March
    - b. Report by September 30 to cover April through June
    - c. Report by December 31 to cover July through September
    - d. Report by March 31 to cover October through December
  4. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided such reports are certified in accordance with 40 CFR 70.5(d) and contain all information relevant to the permit deviation. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107. [Reference 40 CFR 70.6(a)(3)(iii)(B)]
- S. Permittee shall continue to comply with applicable requirements on a timely basis, and will meet on a timely basis applicable requirements that become effective during the permit term. [Reference 40 CFR 70.5(c)(8)(iii)]
- T. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;
  2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;

## 40 CFR PART 70 GENERAL CONDITIONS

3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161;
  4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166. ("MVAC-like appliance" as defined at 40 CFR 82.152);
  5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156; and
  6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [Reference 40 CFR 82, Subpart F]
- U. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. [Reference 40 CFR 82, Subpart B]
- V. Data availability for continuous monitoring or monitoring to collect data at specific intervals: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the Specific Requirements (or Table 3) of this permit, the minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This condition does not apply to Leak Detection and Repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.
- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated December 14, 2007, along with supplemental information dated April 10, 2008, May 8, 2008 and May 22, 2008.
- IV. This permit shall become invalid, for the sources not constructed, if:
  - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
  - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.  
  
This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.
- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.
- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.
- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.
- A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
- B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
- C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:
1. Report by June 30 to cover January through March
2. Report by September 30 to cover April through June
3. Report by December 31 to cover July through September
4. Report by March 31 to cover October through December

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- D. Each report submitted in accordance with this condition shall contain the following information:
1. Description of noncomplying emission(s);
  2. Cause of noncompliance;
  3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
  4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
  5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.
- E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.
- XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:
- A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
  - B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
  - C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
  - D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.
- XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.
- XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

## **LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS**

- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services in accordance with LAC 33:I.Chapter 19.Facility Name and Ownership/Operator Changes Process.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
1. Generally be less than 5 TPY
  2. Be less than the minimum emission rate (MER)
  3. Be scheduled daily, weekly, monthly, etc., or
  4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]

These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

- XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division  
La. Dept. of Environmental Quality  
Post Office Box 4302  
Baton Rouge, Louisiana 70821-4302

- XIX. For Part 70 sources, certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

**EMISSION RATES FOR CRITERIA POLLUTANTS**

AI ID: 1138 - Westlake Vinyls Co LP

Activity Number: PER20070005

Permit Number: 1248-V3

Air - Title V Regular Permit Major Mod

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
VCM-E Plant															
EQT 0015 74-06	13.47	13.47	43.87	23.54	27.65	103.11	0.58	0.58	1.18	0.05	0.05	0.09	3.87	3.87	15.96
EQT 0016 74-07	8.62	11.04	37.76	8.43	10.80	36.94	0.78	1.00	3.42	0.06	0.08	0.27	0.56	0.72	2.47
EQT 0017 74-08							384.86	423.35	4.62						
EQT 0018 95-30							10.96	18.90	48.00				1.62		7.09
EQT 0019 95-32													0.32	0.64	1.41
EQT 0021 95-44													0.03		0.12
EQT 0022 95-45													0.03		0.12
EQT 0024 98-10							0.04	0.11	0.15				0.20		0.90
EQT 0093 83-01	504.10	504.10	3.28										741.86	741.86	4.82
EQT 0094 95-31							2.59	3.88	11.33				2.04	8.94	
EQT 0095 06-01							0.70	0.70	3.07				1.62		7.09
FUG 0002 79-08													2.15		9.41

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 1138 - Westlake Vinyls Co LP

Activity Number: PER20070005

Permit Number: 1248-V3

Air - Title V Regular Permit Major Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0012 00-05	Sulfuric acid	< 0.01		< 0.01
EQT 0013 00-06	Hydrochloric acid	< 0.01		< 0.01
EQT 0014 00-07	Hydrochloric acid	< 0.01		< 0.01
EQT 0015 74-06	1,1,2,2-Tetrachloroethane	< 0.01	< 0.01	< 0.01
	1,1,2-Trichloroethane	< 0.01	< 0.01	< 0.01
	1,2-Dichloroethane	0.91	1.09	3.99
	1,2-Dichloropropane	< 0.01	< 0.01	< 0.01
	1,2-dichloroethylene	0.01	0.02	0.06
	Benzene	< 0.01	< 0.01	< 0.01
	Carbon tetrachloride	0.28	0.33	1.20
	Chlorine	4.00	5.00	17.52
	Chlorobenzene	< 0.01	< 0.01	< 0.01
	Chloroethane	0.12	0.15	0.55
	Chloroform	0.61	0.73	2.67
	Dichloromethane	< 0.01	< 0.01	< 0.01
	Ethyl benzene	< 0.01	< 0.01	< 0.01
	Hydrochloric acid	2.50	3.00	10.95
EQT 0018 95-30	Tetrachloroethylene	< 0.01	< 0.01	< 0.01
	Toluene	0.01	0.01	0.02
	Trichloroethylene	< 0.01	< 0.01	0.02
	Vinyl chloride	0.96	1.15	4.21
	1,1,2,2-Tetrachloroethane	0.17		0.76
EQT 0019 95-32	1,2-Dichloroethane	0.10		0.42
	Bromoform	0.10		0.43
	Chloroform	0.78		3.44
	Vinyl chloride	0.40		1.76
	1,2-Dichloroethane	0.33	0.61	1.32
EQT 0020 95-43	Chloroform	0.01	0.03	0.10
	Hydrochloric acid	< 0.01		< 0.01
EQT 0021 95-44	1,2-Dichloroethane	< 0.01		< 0.01
	Chloroform	< 0.01		< 0.01
	Vinyl chloride	0.02		0.09
EQT 0022 95-45	1,2-Dichloroethane	< 0.01		< 0.01
	Chloroform	< 0.01		< 0.01

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 1138 - Westlake Vinyls Co LP

Activity Number: PER20070005

Permit Number: 1248-V3

Air - Title V Regular Permit Major Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0022 95-45	Vinyl chloride	< 0.02		0.09
EOT 0024 98-10	1,2-Dichloroethane	0.16		0.71
	Chloroform	0.04		0.18
EOT 0093 83-01	1,2-Dichloroethane	200.89	200.89	1.31
EOT 0094 95-31	1,1,2-Trichloroethane	0.18		0.83
	1,2-Dichloroethane	1.12		4.89
	Chloroform	0.74		3.23
	1,1,2,2-Tetrachloroethane	0.17		0.76
EOT 0095 08-01	1,2-Dichloroethane	0.10		0.42
	Bromoform	0.10		0.43
	Chloroform	0.78		3.44
	Vinyl chloride	0.40		1.76
	Sulfuric acid	< 0.01		< 0.01
FUG 0002 79-08	1,1,2-Trichloroethane	< 0.01		0.02
	1,2-Dichloroethane	1.35		5.93
	1,2-dichloroethylene	< 0.01		< 0.01
	Carbon tetrachloride	< 0.01		< 0.01
	Chlorine	0.12		0.52
	Chloroethane	< 0.01		< 0.01
	Chloroform	< 0.01		< 0.01
	Hydrochloric acid	0.01		0.04
	Methyl chloride	< 0.01		< 0.01
	Propylene	0.09		0.38
UNF 0002 VCM-E Plant	Vinyl chloride	0.44		1.90
	1,1,2,2-Tetrachloroethane			1.52
	1,1,2-Trichloroethane			0.85
	1,2-Dichloroethane			18.99
	1,2-Dichloropropane			< 0.01
	1,2-dichloroethylene			0.06
	Benzene			< 0.01
	Bromoform			0.86
	Carbon tetrachloride			1.21
	Chlorine			18.04
	Chlorobenzene			< 0.01

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 1138 - Westlake Vinyls Co LP

Activity Number: PER20070005

Permit Number: 1248-V3

Air - Title V Regular Permit Major Mod

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
UNF 0002 VCM-E Plant	Chloroethane			0.55
	Chloroform			13.06
	Dichloromethane			< 0.01
	Ethyl benzene			< 0.01
	Hydrochloric acid			10.99
	Methyl chloride			< 0.01
	Propylene			0.38
	Sulfuric acid			< 0.01
	Tetrachloroethylene			< 0.01
	Toluene			0.02
	Trichloroethylene			0.02
	Vinyl chloride			9.63

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

**SPECIFIC REQUIREMENTS**

AI ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
 Air - Title V Regular Permit Major Mod

**EQT0013 00-06 VCM Plant Sludge Reactor TK-8619**

1 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

**EQT0014 00-07 VCM Plant pH Adjustment Tank, TK-8613**

2 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

**EQT0015 74-06 VCM Plant - Vent Incinerator Scrubber**

3 [40 CFR 63.113(a)(2)]

Organic HAP  $\geq 98\%$  reduction by weight, or  $\leq 20$  ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c).  
 For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]

4 [40 CFR 63.114(a)(4)(i)]

Which Months: All Year Statistical Basis: None specified  
 pH monitored by pH instrument continuously. Equip pH instrument with a continuous recorder. Monitor the pH of the scrubber effluent.  
 Subpart G. [40 CFR 63.114(a)(4)(i)]

5 [40 CFR 63.114(a)(4)(ii)]

Which Months: All Year Statistical Basis: None specified  
 Flow rate monitored by flow rate monitoring device continuously. Equip the flow monitor with a continuous recorder and install at the scrubber influent for liquid flow. Determine gas flow using one of the procedures specified in 40 CFR 63.114(a)(4)(ii)(A) through (a)(4)(ii)(C). Subpart G. [40 CFR 63.114(a)(4)(ii)]

6 [40 CFR 63.119(e)(1)]

Which Months: All Year Statistical Basis: None specified  
 Inlet emissions: Organic HAP  $\geq 95\%$  reduction, except as provided in 40 CFR 63.119(e)(2). If a flare is used, it shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.119(e)(1)]

7 [40 CFR 63.126(d)(1)(i)]

Which Months: All Year Statistical Basis: None specified  
 Halogenated vent streams: Hydrogen halides and halogens  $\geq 99\%$  reduction, or reduce the outlet mass emission rate of total hydrogen halides and halogens  $< 0.45$  kg/hr, whichever is less stringent. Subpart G. [40 CFR 63.126(d)(1)(i)]

8 [40 CFR 63.127(a)(4)(i)]

Which Months: All Year Statistical Basis: None specified  
 pH monitored by pH instrument continuously. Equip the pH monitor with a continuous recorder. Monitor the pH of the scrubber effluent.  
 Subpart G. [40 CFR 63.127(a)(4)(i)]

9 [40 CFR 63.127(a)(4)(ii)]

Which Months: All Year Statistical Basis: None specified  
 Flow monitored by flow rate monitoring device continuously. Equip the flow meter with a continuous recorder and install at the scrubber influent for liquid flow. Determine gas flow using one of the procedures specified in 40 CFR 63.127(a)(4)(ii)(A) through (a)(4)(ii)(C). Subpart G. [40 CFR 63.127(a)(4)(ii)]

10 [40 CFR 63.127(d)(2)(i)]

Which Months: All Year Statistical Basis: None specified  
 Vent system: If car-seal has been broken or valve position changed, record that the vent stream has been diverted. Return the car-seal or lock-and-key combination to the secured position as soon as practicable but not later than 15 calendar days after the change is position is detected.  
 Subpart G. [40 CFR 63.127(d)(2)(i)]

11 [40 CFR 63.127(d)(2)]

Vent system: Secure the by-pass line valve in the closed position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.127(d)(2)]

**SPECIFIC REQUIREMENTS**

AIR ID: 1138 - Westlake Vinyl's Co LP  
 Activity Number: PIER20070005  
 Permit Number: 1248-V3  
**Air - Title V Regular Permit Major Mod**

**EQT0015 74-06 VCM Plant - Vent Incinerator Scrubber**

- 12 [40 CFR 63.129] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.129(a) through (f). Subpart G.
- 13 [40 CFR 63.139(c)(4)] Total Organic HAP or Total Organic Compounds (less methane and ethane)  $\geq 95\%$  reduction by weight by removal or destruction by chemical reaction with the scrubbing liquid; or Outlet concentration: Total Organic HAP or TOC (less methane and ethane)  $< 20$  ppmv, whichever is less stringent. Subpart G. [40 CFR 63.139(c)(4)]
- 14 [40 CFR 63.148(b)(1)(i)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(1)(i)]
- 15 [40 CFR 63.148(b)(1)(ii)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(1)(ii)]
- 16 [40 CFR 63.148(b)(2)(i)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(i)]
- 17 [40 CFR 63.148(b)(2)(ii)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(ii)]
- 18 [40 CFR 63.148(b)(2)(iii)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (ductwork): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(2)(iii)]
- 19 [40 CFR 63.148(b)(3)] Which Months: All Year Statistical Basis: None specified Fixed roof, cover, or enclosure: Presence of a leak monitored by visual, audible, and/or olfactory once initially and once every six months as specified in 40 CFR 63.133 through 63.137. Subpart G. [40 CFR 63.148(b)(3)]
- 20 [40 CFR 63.148(d)] Which Months: All Year Statistical Basis: None specified Repair leaks (as indicated by an instrument reading greater than 500 ppm above background or by visual inspections) as soon as practicable, except as provided in 40 CFR 63.148(e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.148(d)(3). Subpart G. [40 CFR 63.148(d)]
- 21 [40 CFR 63.148(f)(1)] Vapor collection system or closed vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.148(f)(1)]
- 22 [40 CFR 63.148(f)(2)] Which Months: All Year Statistical Basis: None specified Vapor collection system or closed vent system (bypass lines): Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.148(f)(2)]
- 23 [40 CFR 63.148(i)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.148(i)(1) through (i)(6). Subpart G. [40 CFR 63.148(i)]
- 24 [40 CFR 63.148(j)] Submit the information specified in 40 CFR 63.148(j)(1) through (j)(3) with the reports required by 40 CFR 63.182(b) of subpart H or 40 CFR 63.152(c). Subpart G. [40 CFR 63.148(j)]

**SPECIFIC REQUIREMENTS**

AIR ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
 Air - Title V Regular Permit Major Mod

**EQT0015 74-06 VCM Plant - Vent Incinerator Scrubber**

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33.III.1305.A.1-7.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: Six-minute average

LAER is good combustion practices and low NOx burners to limit NOx emissions to 0.3 lb/MM BTU.

Comply with all applicable provisions of PSD-LA-734. BACT is good combustion practices and low NOx burners to limit NOx emissions to 0.3 lb/MM BTU.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of emissions testing. Retain records of emission test results and other data needed to determine emissions. Retained records at the source, or at an alternate location approved by DEQ for a minimum of two years, and make available upon request for inspection by DEQ.

**EQT0016 74-07 VCM Plant - EDC Cracking Furnace**

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: None specified

Total suspended particulate <= 0.6 lb/MMBTU of heat input.

Which Months: All Year Statistical Basis: None specified

Nitrogen Oxides <= 0.08 lb/MM BTU.

Which Months: May-Sep Statistical Basis: Thirty-day rolling average

Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter.

Which Months: May-Sep Statistical Basis: None specified

**EQT0017 74-09 VCM Plant - Decoking of EDC Cracking Furnace**

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: None specified

Total suspended particulate <= 0.6 lb/MMBTU of heat input.

Which Months: All Year Statistical Basis: None specified

36 [LAC 33.III.1101.B]

37 [LAC 33.III.1313.C]

**SPECIFIC REQUIREMENTS**

Air ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
 Air - Title V Regular Permit Major Mod

**EQT0018 95-30 VCM Plant Cooling Tower**

Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain the records identified in 40 CFR 63.104(f)(1) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]  
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

**EQT0019 95-32 VCM Plant Sumps**

Maintenance wastewater: Incorporate the procedures described in 40 CFR 63.105(b) and (c) as part of the start-up, shutdown and malfunction plan required under 40 CFR 63.6(e)(3). Subpart F. [40 CFR 63.105(d)]

Maintenance wastewater: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the start-up, shut-down, and malfunction plan required under 40 CFR 63.6(e)(3). Subpart F. [40 CFR 63.105(e)]

Maintenance wastewater: Prepare a description of maintenance procedures for the management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair and during periods which are not shutdowns as specified in 40 CFR 63.105(b)(1) through (b)(3). Modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. Subpart F.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

**EQT0024 98-10 VCM Plant - C12 Destruct Cooling Tower**

Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**

AI ID: 1138 - Westlake Vinyls Co LP

Activity Number: PER20070005

Permit Number: 1248-V3

Air - Title V Regular Permit Major Mod

**EQT0024 98-10 VCM Plant - C12 Destruct Cooling Tower**

48 [40 CFR 63.104(d)]  
 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

49 [40 CFR 63.104(f)]  
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]  
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

50 [LAC 33.III.1311.C]  
 Which Months: All Year Statistical Basis: Six-minute average  
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

**EQT0093 83-01 VCM Plant - HCl Vent Tank Scrubber**

52 [40 CFR 63.6(e)(1)(ii)]  
 Operation and maintenance requirements: At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. [40 CFR 63.6(e)(1)(ii)]

**EQT0094 95-31 VCM Plant Cooling Tower**

53 [40 CFR 63.104(b)]  
 Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

54 [40 CFR 63.104(d)]  
 Which Months: All Year Statistical Basis: None specified  
 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

55 [40 CFR 63.104(f)]  
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]  
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.  
 Which Months: All Year Statistical Basis: Six-minute average  
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

**SPECIFIC REQUIREMENTS**

AI ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
**Air - Title V Regular Permit Major Mod**

**EQT0095 06-01 VCM Plant - EDC Cooling Tower**

Heat exchange systems (cooling water): HAP monitored by the regulations specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulations specified frequency. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]

Total suspended particulate <= 41.3 lb/hr. The rate of emission shall be the total of all emission points from the source.

Which Months: All Year Statistical Basis: None specified

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

**FUG0002 79-08 VCM Plant - Fugitives**

Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. Subpart H. [40 CFR 63.162(c)]

Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(i)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]

Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (j). If a reading of 10,000 ppm (phase II); or 5,000 ppm (phase III, pumps handling polymerizing monomers), 2,000 ppm (phase III, pumps in food/medical service), or 1,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(1)]

Which Months: All Year Statistical Basis: None specified

Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]

Which Months: All Year Statistical Basis: None specified

Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 5 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) and 40 CFR 63.171. Subpart H. [40 CFR 63.163(c)]

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**SPECIFIC REQUIREMENTS**

AI ID: 1138 - Westlake Vinyl's Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
 Air - Title V Regular Permit Major Mod

**FUG0002 79-08 VCM Plant - Fugitives**

- Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]
- Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]
- Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]
- Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]
- Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.1180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]
- Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)]
- Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each pump as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.163(b)(3) and (e)(4), and the daily requirements of 40 CFR 63.163(e)(5). Subpart H. [40 CFR 63.163(h)]
- Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**

AIR ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
 Air - Title V Regular Permit Major Mod

**FUG0002 79-08 VCM Plant - Fugitives**

- 79 [40 CFR 63.163(j)(1)] Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]
- 80 [40 CFR 63.163(j)(2)] Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]
- Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)]
- Compressors: Ensure that the barrier fluid is not in liquid service. Subpart H. [40 CFR 63.164(c)]
- Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]
- Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]
- Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(i)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(g). Subpart H.
- Which Months: All Year Statistical Basis: None specified
- Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
- Which Months: All Year Statistical Basis: None specified
- Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]

**SPECIFIC REQUIREMENTS**

All ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
 Air - Title V Regular Permit Major Mod

**FUG0002 79-08 VCM Plant - Fugitives**

- 91 [40 CFR 63.165(b)(2)] Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- 92 [40 CFR 63.165(d)(2)] Which Months: All Year Statistical Basis: None specified
- Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- 93 [40 CFR 63.166] Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H.
- 94 [40 CFR 63.167] Open-ended valves or lines: Equip with a cap, blind flange, plug, or second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H.
- 95 [40 CFR 63.168(c)] Valves in gas/vapor service or light liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- 96 [40 CFR 63.168(c)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- 97 [40 CFR 63.168(d)(1)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If selecting to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]
- 98 [40 CFR 63.168(d)(2)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]
- 99 [40 CFR 63.168(e)(1)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(e)(1)]
- 100 [40 CFR 63.168(f)(3)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(f)(3)]

**SPECIFIC REQUIREMENTS**

AI ID: 1138 - Westlake Vinyl's Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
 Air - Title V Regular Permit Major Mod

**FUG0002 79-08 VCM Plant - Fugitives**

- 101 [40 CFR 63.168(f)] Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]
- 102 [40 CFR 63.168(h)(1)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]
- 103 [40 CFR 63.168(h)(2)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]
- Which Months: All Year Statistical Basis: None specified
- 104 [40 CFR 63.168(i)(1)] Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]
- 105 [40 CFR 63.168(i)(3)] Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]
- Which Months: All Year Statistical Basis: None specified
- 106 [40 CFR 63.169(a)] Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]
- Which Months: All Year Statistical Basis: None specified
- 107 [40 CFR 63.169(c)] Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]
- 108 [40 CFR 63.172(f)(1)(i)] Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- 109 [40 CFR 63.172(f)(1)(ii)] Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- 110 [40 CFR 63.172(f)(2)(i)] Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(i)]
- Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**

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- 111 [40 CFR 63.172(f)(2)(ii)] Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(ii)]  
 Which Months: All Year Statistical Basis: None specified  
 Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(h)]
- 112 [40 CFR 63.172(b)] Closed-vent system (bypass lines): Flow monitored by flow indicator once every 15 minutes. Install flow indicator at the entrance to any bypass line. Subpart H. [40 CFR 63.172(j)(1)]  
 Which Months: All Year Statistical Basis: None specified  
 Closed-vent system (bypass lines): Flow recordkeeping by electronic or hard copy once every 15 minutes. Generate records as specified in 40 CFR 63.118(a)(3). Subpart H. [40 CFR 63.172(j)(1)]
- 113 [40 CFR 63.172(j)(1)] Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]
- 114 [40 CFR 63.172(i)(1)] Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]  
 Which Months: All Year Statistical Basis: None specified  
 Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(1)]
- 115 [40 CFR 63.172(k)(1)] Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years. Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(2)]  
 Which Months: All Year Statistical Basis: None specified  
 Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]
- 116 [40 CFR 63.172(k)(2)] Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]  
 Which Months: All Year Statistical Basis: None specified  
 Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
- 117 [40 CFR 63.172(i)(1)]  
 118 [40 CFR 63.172(j)(2)]  
 119 [40 CFR 63.172(m)]  
 120 [40 CFR 63.173(a)]  
 121 [40 CFR 63.173(b)]  
 Which Months: All Year Statistical Basis: None specified

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- Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(3)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(ii)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(7)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H. [40 CFR 63.173(g)]
- Which Months: All Year Statistical Basis: None specified
- 122 [40 CFR 63.173(d)(6)(i)]
- 123 [40 CFR 63.173(d)(6)]
- 124 [40 CFR 63.173(d)(2)]
- 125 [40 CFR 63.173(d)(3)]
- 126 [40 CFR 63.173(d)(4)]
- 127 [40 CFR 63.173(d)(6)(ii)]
- 128 [40 CFR 63.173(d)(6)]
- 129 [40 CFR 63.173(d)]
- 130 [40 CFR 63.173(g)]

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- 131 [40 CFR 63.173(h)(1)] Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]
- 132 [40 CFR 63.173(h)(3)] Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)]
- 133 [40 CFR 63.173(j)(1)] Which Months: All Year Statistical Basis: None specified Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)]
- 134 [40 CFR 63.173(j)(2)] Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule, otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)]
- 135 [40 CFR 63.174(b)(3)(i)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)]
- 136 [40 CFR 63.174(b)(3)(ii)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)]
- 137 [40 CFR 63.174(c)(1)(i)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(i). Subpart H. [40 CFR 63.174(c)(1)(i)]
- 138 [40 CFR 63.174(d)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]
- 139 [40 CFR 63.174(f)(1)] Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]
- 140 [40 CFR 63.174(f)(2)] Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]

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- Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]
- Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory, or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]
- Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2).
- Subpart H. [40 CFR 63.174(i)]
- Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H.
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.18 (a) through (k). Subpart H.
- Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]
- Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]
- Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c).
- Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]

**UNF0002 VCM-E Plant**

- Total Organic Compounds (less methane and ethane)  $\geq$  98 % reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen, whichever is less stringent. If a boiler or process heater is used to comply with this paragraph, then introduce the vent stream into the flame zone of the boiler or process heater. Subpart III. [40 CFR 60.612(a)]
- Which Months: All Year Statistical Basis: None specified
- Determine compliance with 40 CFR 60.612 using the methods and procedures listed in 40 CFR 60.614(a) through (g) as applicable. Subpart III.
- Notify the DEQ with the specific provisions of 40 CFR 60.612 (40 CFR 60.612(a),(b) or (c)), as applicable with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.612 that the operator elects to comply with. Conduct the performance test specified by 40 CFR 60.614 within 180 days of implementing a change. Subpart III. [40 CFR 60.615(a)]
- Equipment/operational data recordkeeping by the regulation's specified method(s) continuously. Maintain up-to-date, readily-accessible records of the required information listed in 40 CFR 60.615(b) through (h). Subpart III.
- Total Organic Compounds (less methane and ethane)  $\geq$  98 % reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent. Subpart NNN. [40 CFR 60.662(a)]
- Which Months: All Year Statistical Basis: None specified

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- Run all affected facilities at full operating conditions and flow rates during any performance test intended to demonstrate compliance with 40 CFR 60.662. Subpart NNN. [40 CFR 60.664(a)] Use the 40 CFR 60 appendix A methods listed in 40 CFR 60.664(b) through (h), except as provided under 40 CFR 60.60.8(b), as reference methods to determine compliance with the emission limit or percent reduction efficiency specified under 40 CFR 60.662(a). Subpart NNN. [40 CFR 60.664(b)] Notify the DEQ with the specific provisions of 40 CFR 60.662 (40 CFR 60.662(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.662 that the operator elects to comply with. Conduct the performance test specified by 40 CFR 60.664 within 180 days after the change. Subpart NNN. [40 CFR 60.665(a)] Performance Test Data recordkeeping by electronic or hard copy continuously. Maintain up-to-date, readily accessible records of the required compliance information listed in 40 CFR 60.665(b) through (j) as applicable measured during each performance test required under 40 CFR 60.8. Submit the same specified data in the reports of all subsequently required performance tests where either the emission control efficiency of a control device, outlet concentration of TOC, or the TRE index value of a vent stream from a recovery system is determined. Subpart NNN. [40 CFR 60.665(b)] Total Organic Compounds (less methane and ethane)  $\geq 98\%$  reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent. Subpart RRR. [40 CFR 60.702(a)] Which Months: All Year Statistical Basis: None specified Run all affected facilities at full operating conditions and flow rates during any performance test intended to demonstrate compliance with 40 CFR 60.702. Subpart RRR. [40 CFR 60.704(a)] • Determine compliance with 40 CFR 60.702 using the methods listed in 40 CFR 60.704(b) through (i), except as provided under 40 CFR 60.60.8(b). Subpart RRR. [40 CFR 60.704(b)] Notify the DEQ with the specific provisions of 40 CFR 60.702 (40 CFR 60.702(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.702 that the operator elects to make. Conduct the performance test specified by 40 CFR 60.704 within 180 days after the change. Subpart RRR. [40 CFR 60.705(a)] Performance Test Data recordkeeping by electronic or hard copy continuously. Maintain up-to-date, readily accessible records of the required compliance information listed in 40 CFR 60.705(b) through (l) measured during each performance test required under 40 CFR 60.8. Submit the same specified data in the reports of all subsequently required performance tests where either the emission control efficiency of a control device, outlet concentration of TOC, or the TRE index value of a vent stream from a recovery system is determined. Subpart RRR. [40 CFR 60.705(b)] All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A. Benzene < 1 Mg/yr (1.1 ton/yr) total quantity. Subpart FF. [40 CFR 61.342(d)(2)(i)] Which Months: All Year Statistical Basis: None specified Determine compliance with 40 CFR 61 Subpart FF using the test methods and procedures specified in 40 CFR 61.355(a) through (l), as applicable. Subpart FF.
- 154 [40 CFR 60.664(a)]  
 155 [40 CFR 60.664(b)]  
 156 [40 CFR 60.665(a)]  
 157 [40 CFR 60.665(b)]  
 158 [40 CFR 60.702(a)]  
 159 [40 CFR 60.704(a)]  
 160 [40 CFR 60.704(b)]  
 161 [40 CFR 60.705(a)]  
 162 [40 CFR 60.705(b)]  
 163 [40 CFR 60.]  
 164 [40 CFR 61.342(d)(2)(i)]  
 165 [40 CFR 61.355]

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166 [40 CFR 61.356]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 61.356(a) through (n), as applicable. Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF.

Submit report: Due whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more. Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3).

Subpart FF. [40 CFR 61.357(b)]

Vinyl chloride &lt;= 10 ppm, except as provided in 40 CFR 61.65(a). Subpart F. [40 CFR 61.62(a)]

Which Months: All Year Statistical Basis: Three-hour average

Vinyl chloride <= 0.2 g/kg (0.4 lb/ton) of the 100 percent ethylene dichloride product from the oxychlorination process, except as provided in 40 CFR 61.65(a). Subpart F. [40 CFR 61.62(b)]

Which Months: All Year Statistical Basis: Three-hour average

Vinyl chloride &lt;= 10 ppm, except as provided in 40 CFR 61.65(a). Subpart F. [40 CFR 61.63(a)]

Which Months: All Year Statistical Basis: Three-hour average

Relief valves: Do not discharge to the atmosphere from any relief valve on any equipment in vinyl chloride service, except for an emergency relief discharge, and except as provided in 40 CFR 61.65(d). Subpart F. [40 CFR 61.65(a)]

Relief valves: Submit report in writing within 10 days of any relief valve discharge, except for those subject to 40 CFR 61.65(d). Submit a report containing information on the source, nature and cause of the discharge, the date and time of the discharge, the approximate total vinyl chloride loss during the discharge, the method used for determining the vinyl chloride loss (the calculation of the vinyl chloride loss), the action that was taken to prevent the discharge, and measures adopted to prevent future discharges. Subpart F. [40 CFR 61.65(a)]

Operate a reliable and accurate vinyl chloride monitoring system in accordance with the specifications in 40 CFR 61.65(b)(8)(i) for detection of major leaks and identification of the general area of the plant where a leak is located. Subpart F. [40 CFR 61.65(b)(8)(i)]

Implement a formal leak detection and repair program consistent with 40 CFR 61.65(b)(8)(ii)

Implement this program within 90 days of the effective date of 40 CFR 61.65(b)(8)(iii)

Vinyl chloride monitored by continuous emission monitor (CEM) continuously. Monitor emissions from the sources for which emission limits are prescribed in 40 CFR 61.62(a) and (b), 61.63(a), and 61.64(a)(1), (b), (c) and (d), and for any control system to which reactor emissions are required to be ducted in 40 CFR 61.64(a)(2) or to which fugitive emissions are required to be ducted in 40 CFR 61.65(b)(1)(ii) and (b)(2),

Which Months: All Year Statistical Basis: None specified

All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.

Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 68.22. [40 CFR 68.12(b)(1)]

Complete the five-year accident history for the process as provided in 68.42. [40 CFR 68.12(b)(2)]

Ensure that response actions have been coordinated with local emergency planning and response agencies. [40 CFR 68.12(b)(3)]

Include in the RMP the certification specified in 68.12(b)(4). [40 CFR 68.12(b)(4)]

**UNF0002 VCM-E Plant**

166 [40 CFR 61.356]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 61.356(a) through (n), as applicable. Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF.

Submit report: Due whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more. Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3).

Subpart FF. [40 CFR 61.357(b)]

Vinyl chloride &lt;= 10 ppm, except as provided in 40 CFR 61.65(a). Subpart F. [40 CFR 61.62(a)]

Which Months: All Year Statistical Basis: Three-hour average

Vinyl chloride <= 0.2 g/kg (0.4 lb/ton) of the 100 percent ethylene dichloride product from the oxychlorination process, except as provided in 40 CFR 61.65(a). Subpart F. [40 CFR 61.62(b)]

Which Months: All Year Statistical Basis: Three-hour average

Vinyl chloride &lt;= 10 ppm, except as provided in 40 CFR 61.65(a). Subpart F. [40 CFR 61.63(a)]

Which Months: All Year Statistical Basis: Three-hour average

Relief valves: Do not discharge to the atmosphere from any relief valve on any equipment in vinyl chloride service, except for an emergency relief discharge, and except as provided in 40 CFR 61.65(d). Subpart F. [40 CFR 61.65(a)]

Relief valves: Submit report in writing within 10 days of any relief valve discharge, except for those subject to 40 CFR 61.65(d). Submit a report containing information on the source, nature and cause of the discharge, the date and time of the discharge, the approximate total vinyl chloride loss during the discharge, the method used for determining the vinyl chloride loss (the calculation of the vinyl chloride loss), the action that was taken to prevent the discharge, and measures adopted to prevent future discharges. Subpart F. [40 CFR 61.65(a)]

Operate a reliable and accurate vinyl chloride monitoring system in accordance with the specifications in 40 CFR 61.65(b)(8)(i) for detection of major leaks and identification of the general area of the plant where a leak is located. Subpart F. [40 CFR 61.65(b)(8)(i)]

Implement a formal leak detection and repair program consistent with 40 CFR 61.65(b)(8)(ii)

Implement this program within 90 days of the effective date of 40 CFR 61.65(b)(8)(iii)

Vinyl chloride monitored by continuous emission monitor (CEM) continuously. Monitor emissions from the sources for which emission limits are prescribed in 40 CFR 61.62(a) and (b), 61.63(a), and 61.64(a)(1), (b), (c) and (d), and for any control system to which reactor emissions are required to be ducted in 40 CFR 61.64(a)(2) or to which fugitive emissions are required to be ducted in 40 CFR 61.65(b)(1)(ii) and (b)(2),

Which Months: All Year Statistical Basis: None specified

All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.

Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 68.22. [40 CFR 68.12(b)(1)]

Complete the five-year accident history for the process as provided in 68.42. [40 CFR 68.12(b)(2)]

Ensure that response actions have been coordinated with local emergency planning and response agencies. [40 CFR 68.12(b)(3)]

Include in the RMP the certification specified in 68.12(b)(4). [40 CFR 68.12(b)(4)]

**SPECIFIC REQUIREMENTS**

AI ID: 1138 - Westlake Vinyl's Co LP  
 Activity Number: PER20070005  
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 Air - Title V Regular Permit Major Mod

**UNF0002 VCM-E Plant**

- 181 [40 CFR 68.150]
- 182 [40 CFR 68.155]
- 183 [40 CFR 68.160]
- 184 [40 CFR 68.165]
- 185 [40 CFR 68.168]
- 186 [40 CFR 68.180]
- 187 [40 CFR 68.190(c)]
- 188 [40 CFR 68.190]
- 189 [40 CFR 68.200]
- 190 [40 CFR 68.22]
- 191 [40 CFR 68.25]
- 192 [40 CFR 68.28]
- 193 [40 CFR 68.30]
- 194 [40 CFR 68.33]
- 195 [40 CFR 68.36(b)]
- 196 [40 CFR 68.36]
- 197 [40 CFR 68.39]
- 198 [40 CFR 68.42]
- 199 [40 CFR 70.5(a)(1)(iii)]

Submit Risk Management Plan (RMP): Due no later than June 21, 1999, or three years after the date on which a regulated substance is first listed under 68.130, or the date on which a regulated substance is first present above a threshold quantity in a process. Submit in a method and format to a central point as specified by EPA prior to June 21, 1999.

Provide in the RMP an executive summary that includes a brief description of the elements listed in 68.155(a) through (g).

Complete a single registration form and include in the RMP. Cover all regulated substances handled in covered processes. Include in the registration the information specified in 68.160(b)(1) through (13).

Submit in the RMP information one worst-case release scenario for each Program 1 process. Include the data specified in 68.165(b)(1) through (13).

Submit in the RMP the information provided in 68.42(b) on each accident covered by 68.42(a).

Provide in the RMP the emergency response information listed in 68.180(a) through (c).

Submit revised registration to EPA: Due within six months after a stationary source is no longer subject to 40 CFR 68. Indicate that the stationary source is no longer covered. [40 CFR 68.190(c)]

Review and update the RMP as specified in 68.190(b) and submit it in a method and format to a central point specified by EPA prior to June 21, 1999.

Maintain records supporting the implementation of 40 CFR 68 for five years unless otherwise provided.

Use the endpoints specified in 68.22(a) through (g) for analyses of offsite consequences.

Analyze the release scenarios in 68.25, as specified in 68.25(a) through (h).

Identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes, as specified in 68.28(b) through (e). Estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).

List in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).

Submit revised RMP: Due within six months after changes in processes, quantities stored or handled, or any other aspect of the stationary source increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36(b)]

Review and update the offsite consequence analyses at least once every five years. Complete a revised analysis within six months if changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more.

Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain the records specified in 68.39(a) through (e) on the offsite consequence analyses.

Include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. Include the information specified in 68.42(b)(1) through (10) for each accidental release.

Submit Title V permit application for renewal: Due 180 calendar days before permit expiration date. [40 CFR 70.5(a)(1)(iii)]

**SPECIFIC REQUIREMENTS**

AIR ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
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**UNF0002 VCM-E Plant**

- 200 [40 CFR 70.6(a)(3)(iii)(A)]  
 Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- 201 [40 CFR 70.6(a)(3)(iii)(B)]  
 Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [40 CFR 70.6(a)(3)(iii)(B)]
- 202 [40 CFR 70.6(c)(5)(iv)]  
 Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]
- 203 [LAC 33:III.1305]  
 Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.A.1-7.
- 204 [LAC 33:III.2113.A]  
 Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.
- 205 [LAC 33:III.219]  
 Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- 206 [LAC 33:III.2901.D]  
 Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.
- 207 [LAC 33:III.2901.F]  
 If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G.
- 208 [LAC 33:III.501.C.6]  
 Maintain best practical housekeeping and maintenance practices at the highest possible standards to control emissions of highly reactive volatile organic compounds (HRVOC), which include 1,3-Butadiene, Butene, cis-2-Butene, trans-2-Butene, Ethylene, Propylene, Toluene, Xylene, m/p-Xylene, o-Xylene. (State Only).
- 209 [LAC 33:III.501.C.6]  
 Maintain, to the extent practicable, a leak-free facility taking such steps as are necessary and reasonable to prevent leaks and to expediently repair leaks that occur. Update the written plan presently required by LAC 33:III.2113.A.4 within 30 days of receipt of this permit to incorporate these general duty obligations into the housekeeping procedures. The plan shall then be considered a means of emission control subject to the required use and maintenance provisions of LAC 33:III.905. Failure to develop, use, and diligently maintain the plan shall be a violation of this permit. (State Only).
- 210 [LAC 33:III.504]  
 Comply with the requirements of the Nonattainment New Source Review Program. This permit includes provisions of the Nonattainment New Source Review Procedures (NNSR) from LAC 33:III.504.
- 211 [LAC 33:III.509]  
 Comply with the requirements of PSD-LA-734. This permit includes provisions of the Prevention of Significant Deterioration (PSD) review from Permit PSD-LA-734.

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AI ID: 1138 - Westlake Vinyl's Co LP  
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**UNF0002 VCM-E Plant**

- 212 [LAC 33:III.5105.A.1] Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III.Chapter 51.Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III.Chapter 51.Subchapter A, after the effective date of the standard.
- 213 [LAC 33:III.5105.A.2] Do not cause a violation of any ambient air standard listed in LAC 33:III.Table 51.2, unless operating in accordance with LAC 33:III.5109.B.
- 214 [LAC 33:III.5105.A.3] Do not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard.
- 215 [LAC 33:III.5105.A.4] Do not fail to keep records, notify, report or revise reports as required under LAC 33:III.Chapter 51.Subchapter A.
- 216 [LAC 33:III.5107.A.1] Submit Annual Emissions Report: Due annually, by the 31st of March, to the Office of Environmental Assessment, Air Quality Assessment Division, in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.
- 217 [LAC 33:III.5107.A.2] Include a certification statement with the annual emission report and revisions to any emission report that attests that the information contained in the emission report is true, accurate, and complete, and that is signed by a responsible official, as defined in LAC 33:III.502. Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official.
- 218 [LAC 33:III.5107.A] Submit Annual Emissions Report (TEDI): Due annually, by the 31st of March unless otherwise directed by DEQ, to the Office of Environmental Assessment in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.
- 219 [LAC 33:III.5107.B.1] Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but in no case later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere that results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property).
- 220 [LAC 33:III.5107.B.2] Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:III.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:III.3923.
- 221 [LAC 33:III.5107.B.3] Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, immediately, but in no case later than 24 hours after any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:III.3931.
- 222 [LAC 33:III.5107.B.4] Submit notification in the manner provided in LAC 33:III.3923.
- 223 [LAC 33:III.5107.B.5] Submit written report: Due by certified mail to SPOC within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33:III.5107.B.1 through B.3. Include the information specified in LAC 33:III.5107.B.4.a.i through B.4.a.viii.
- Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, IF THEY CAN BE MEASURED AND CAN BE RELIABLY QUANTIFIED USING GOOD ENGINEERING PRACTICES, to DEQ along with the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge.

**SPECIFIC REQUIREMENTS**

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- 224 [LAC 33:III.5109.C] Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III:Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by DEQ.
- 225 [LAC 33:III.5113.A.1] Submit notification in writing. Due to SPOC not more than 60 days nor less than 30 days prior to initial start-up. Submit the anticipated date of the initial start-up.
- 226 [LAC 33:III.5113.A.2] Submit notification in writing. Due to SPOC within 10 working days after the actual date of initial start-up of the source. Submit the actual date of initial start-up of the source.
- 227 [LAC 33:III.5113.B.6] Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of emissions testing. Retain records of emission test results and other data needed to determine emissions. Retained records at the source, or at an alternate location approved by DEQ for a minimum of two years, and make available upon request for inspection by DEQ.
- 228 [LAC 33:III.5609.A.1.b] Activate the preplanned abatement strategy listed in LAC 33:III.5611. Table 5 when the administrative authority declares an Air Pollution Alert.
- 229 [LAC 33:III.5609.A.2.b] Activate the preplanned strategy listed in LAC 33:III.5611. Table 6 when the administrative authority declares an Air Pollution Warning.
- 230 [LAC 33:III.5609.A.3.b] Activate the preplanned abatement strategy listed in LAC 33:III.5611. Table 7 when the administrative authority declares an Air Pollution Emergency.
- 231 [LAC 33:III.5609.A] Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611.Tables 5, 6, and 7.
- 232 [LAC 33:III.5901.A] Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901.
- 233 [LAC 33:III.919.D] Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment, Air Quality Assessment Division. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D.
- 234 [LAC 33:III.927] Report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:1 Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Submit written reports to the department pursuant to LAC 33:1.3925. Submit timely and appropriate follow-up reports detailing methods and procedures to be used to prevent similar atmospheric releases.

**General Information****AI ID:** 1138 Westlake Vinyls Co LP**Activity Number:** PER20070005**Permit Number:** 1248-V3**Air - Title V Regular Permit Major Mod**

<b>Also Known As:</b>	<b>ID</b>	<b>Name</b>	<b>User Group</b>	<b>Start Date</b>
	0180-00008	Westlake Vinyls Co LP	CDS Number	11-16-1999
	51-0370356	Federal Tax ID	Federal Tax ID	11-21-1999
LAD003913449		Westlake Vinyls Co LP	Hazardous Waste Notification	10-07-2005
PMT/CA		GPRA Baselines	Hazardous Waste Permitting	10-01-1997
LAD003913449		Borden	Inactive & Abandoned Sites	11-01-1979
LAD0000281		LPDES #	LPDES Permit #	05-22-2003
LAR10B026		LPDES #	LPDES Permit #	05-22-2003
WP0912		LWDPS #	LWDPS Permit #	06-25-2003
04105		LELAP #	Laboratory Services Division	02-23-2004
2019		Permit #	Multimedia	08-25-1999
GL-558		Priority 1 Emergency Site	Priority 1 Emergency Site	07-18-2006
G-005-11003		Radiation General License	Radiation License Number	04-18-2006
GD-005-1652		Site ID #	Solid Waste Facility No.	11-30-1999
16392		Site ID #	Solid Waste Facility No.	07-24-2001
38776		Borden Chemical	TEMPO Merge	10-31-2000
		Borden Chemicals & Plastics	TEMPO Merge	10-31-2000
		Borden Chemical Division of Borden Inc	TEMPO Merge	10-31-2000
		Borden Chemicals & Plastics	TEMPO Merge	10-31-2000
		Borden Chemical Inc - Geismar Plant	TEMPO Merge	07-10-2001
		Borden Chemical Inc - Formaldehyde Plant	TEMPO Merge	10-31-2000
		Borden Chemical Inc - Formaldehyde Plant	TEMPO Merge	08-01-2001
		TRI #	Toxic Release Inventory	07-13-2004
	1243	UST Case History Case Number	UST Case Number	11-21-1999
	878	UST Case History Case Number	UST Case Number	11-21-1999
	879	UST Case History Case Number	UST Case Number	11-21-1999
	030000824	UST Facility ID (from UST legacy data)	UST FID #	10-11-2002
Physical Location:		36045 Hwy 30 Geismar, LA 70734	Main FAX: Main Phone:	2256730444 2256730647
Mailing Address:		PO Box 228 Geismar, LA 707340228	Phone (Type)	Relationship
Location of Front Gate:		30° 20' 45" 71 hundredths latitude, 91° 15' 28" 1 hundredths longitude, Coordinate Method: GPS-Unspecified, Coordinate Datum: NAD83		
Related People:		Name Mailing Address		TPOR148

## General Information

All ID: 1138 Westlake Vinyls Co LP

Activity Number: PER20070005

Permit Number: 1248-V

Air - Title V Regular Permit Major Mod

Name \_\_\_\_\_

John Casey	PO Box 228	Geismar, LA 707340228	jcasey@westlake.co	Responsible Official for
John Casey	PO Box 228	Geismar, LA 707340228	2256736121 (WFP)	Responsible Official for
John Casey	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Responsible Official for
John Casey	PO Box 228	Geismar, LA 707340228	jcasey@westlake.co:	Accident Prevention Contact for
John Casey	PO Box 228	Geismar, LA 707340228	2256736121 (WFP)	Solid Waste Billing Party for
John Casey	PO Box 228	Geismar, LA 707340228	jcasey@westlake.co:	Water Billing Party for
John Casey	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Water Billing Party for
John Casey	PO Box 228	Geismar, LA 707340228	2256736121 (WFP)	Water Billing Party for
John Casey	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Solid Waste Billing Party for
John Casey	PO Box 228	Geismar, LA 707340228	jcasey@westlake.co:	Solid Waste Billing Party for
John Casey	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Accident Prevention Contact for
John Casey	PO Box 228	Geismar, LA 707340228	2256736121 (WFP)	Accident Prevention Contact for
John Casey	PO Box 228	Geismar, LA 707340228	KKHONSARI@WES	Radiation Contact For
John Casey	PO Box 228	Geismar, LA 707340228	KKHONSARI@WES	Emission Inventory Contact for
John Casey	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Emission Inventory Contact for
John Casey	PO Box 228	Geismar, LA 707340228	2256736121 (WFP)	Radiation Contact For
Karen Khonsari	PO Box 228	Geismar, LA 707340228	2256730407 (WFP)	Water Permit Contact For
Karen Khonsari	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Haz. Waste Billing Party for
Karen Khonsari	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Accident Prevention Billing Party for
Karen Khonsari	PO Box 228	Geismar, LA 707340228	2256730607 (WFP)	Accident Prevention Billing Party for
Karen Khonsari	PO Box 228	Geismar, LA 707340228	2256730607 (WFP)	Haz. Waste Billing Party for
Karen Khonsari	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Accident Prevention Contact for
Karen Khonsari	PO Box 228	Geismar, LA 707340228	2256730444 (WFP)	Water Permit Contact For

Bivalved Organisms

32518. Other Basic Inorganic Chemical Manufacturing

NAIG Code:

**General Information**

AI ID: 1138 Westlake Vinyls Co LP  
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Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit.  
Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 219-3247 or email your changes to facupdate@la.gov.

INVENTORIES

AI ID: 1138 - Westlake Vinyls Co LP  
 Activity Number: PER20070005  
 Permit Number: 1248-V3  
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## Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
<b>VCM E Plant</b>						
EQT0012	00-05 - VCM Plant Cooling Tower pH Control Tank	1000 gallons	10000 gallons/yr	10000 gallons/yr		8760 hr/yr (All Year)
EQT0013	00-06 - VCM Plant Sludge Reactor TK-8619	52000 gallons/yr	52000 gallons/yr	52000 gallons/yr		8760 hr/yr (All Year)
EQT0014	00-07 - VCM Plant pH Adjustment Tank, TK-8613	12650 gallons	52000 gallons/yr	52000 gallons/yr		8760 hr/yr (All Year)
EQT0015	74-06 - VCM Plant Incinerator Scrubber	67.7 MM BTU/hr	37.5 MM BTU/hr	37.5 MM BTU/hr		8760 hr/yr (All Year)
EQT0016	74-07 - VCM Plant - EDC Cracking Furnace	134 MM BTU/hr	105 MM BTU/hr	105 MM BTU/hr		8760 hr/yr (All Year)
EQT0017	74-09 - VCM Plant - Decoking of EDC Cracking Furnace					24 hr/yr (All Year)
EQT0018	95-30 - VCM Plant Cooling Tower	2.16 MM gallons/hr	18900 MM gallons/yr	18900 MM gallons/yr		8760 hr/yr (All Year)
EQT0019	95-32 - VCM Plant Sumps					8760 hr/yr (All Year)
EQT0020	95-43 - VCM Wastewater Tank 8640	200000 gallons	370000 gallons/yr	370000 gallons/yr		8760 hr/yr (All Year)
EQT0021	95-44 - VCM Wastewater Tank 8649A	25000 gallons	18.4 MM gallons/yr	18.4 MM gallons/yr		8760 hr/yr (All Year)
EQT0022	95-45 - VCM Wastewater Tank 8649B	25000 gallons	18.4 MM gallons/yr	18.4 MM gallons/yr		8760 hr/yr (All Year)
EQT0024	98-10 - VCM Plant - Cl2 Destruct Cooling Tower	175200 gallons/hr	1535 MM gallons/yr	1535 MM gallons/yr		8760 hr/yr (All Year)
EQT0025	98-31 - VCM Plant - HCl Vent Tank Scrubber					13 hr/yr (All Year)
EQT0026	98-31 - VCM Plant Cooling Tower	.51 MM gallons/hr	4464 MM gallons/yr	4464 MM gallons/yr		8760 hr/yr (All Year)
EQT0027	06-01 - VCM Plant - EDC Cooling Tower	.15 MM gallons/hr	1752 MM gallons/yr	1752 MM gallons/yr		8760 hr/yr (All Year)
EQT0028	06-02 - Sulfuric Acid Tote Tanks	275 (other units)	275 (other units)	275 (other units)	Other Units: Gallons/Rate	8760 hr/yr (All Year)
EQT0029	V-7102A - V-7102A P.C. Column #2 Heavy End					8760 hr/yr (All Year)
EQT00298	E-7111A - E-7111A P.C. Column #3 Recovery Column					8760 hr/yr (All Year)
EQT0098	V-7101A - V-7101A P.C. Column #1 Light End Column					8760 hr/yr (All Year)
EQT0100	E-7102 A/B - E-7102 A/B EDC Direct Chlorination Vent Condensers					8760 hr/yr (All Year)
EQT0101	V-7405 - V-7405 Steam Stripper Overhead Accumulators					8760 hr/yr (All Year)
EQT0102	V-7406 - V-7406 Steam Stripper Overhead Accumulators					8760 hr/yr (All Year)
EQT0103	TK-7609 A/B - TK-7609 A/B EDC Storage Tanks					8760 hr/yr (All Year)
EQT0104	TK-7611 A/B - TK-7611 A/B EDC Storage Tanks					8760 hr/yr (All Year)
EQT0105	TK-7613A - TK-7613A EDC Storage Tanks					8760 hr/yr (All Year)
EQT0106	TK-7601B-D - TK-7601B-D VCM Check Tanks VCM Storage Tanks					8760 hr/yr (All Year)
EQT0107	TK-7604A-B - TK-7604A-B VCM Check Tanks VCM Storage Tanks					8760 hr/yr (All Year)
EQT0108	V-7204A - V-7204A VCM Dryers					8760 hr/yr (All Year)
EQT0109	V-7205A/B - V-7205A/B VCM Dryers					8760 hr/yr (All Year)
EQT0110	V-7107A - V-7107A Quench Column Recovery Pot					8760 hr/yr (All Year)
EQT0111	V-7108A - V-7108A Quench Column Recovery Pot					8760 hr/yr (All Year)
EQT0112	V-7201A - V-7201A Quench Column Accumulator					8760 hr/yr (All Year)
EQT0113	E-7206A - E-7206A VCM Column Condenser					8760 hr/yr (All Year)
EQT0114	TK-7412A - TK-7412A Process Liquid Sphere					8760 hr/yr (All Year)
EQT0115	TK-7604C - TK-7604C Process Liquid Sphere					8760 hr/yr (All Year)
EQT0116	T-10103 PVC Steam Stripper (Wat Vent)					8760 hr/yr (All Year)
EQT0117	C-10107 - C-10107 PVC Recovery Compressor (Dry Vent)					8760 hr/yr (All Year)
EQT0118	C-10104 - C-10104 PVC Gas Holder Recovery Compressor					8760 hr/yr (All Year)

INVENTORIES

AI ID: 1138 - Westlake Vinyls Co LP  
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## Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
<b>VCM-E Plant</b>						
EQT0119	(Dry Vent) E-10123 Recovery VCM Receiver Condenser (Dry Vent)					8760 hr/yr (All Year)
EQT0120	E-10129 Recovery VCM Receiver Condenser (Dry Vent)					8760 hr/yr (All Year)
EQT0121	E-10133 Recovery VCM Receiver Condenser (Dry Vent)					8760 hr/yr (All Year)
EQT0122	TK-5201 EDC Barge Loading Tank					8760 hr/yr (All Year)
EQT0123	TK-7417 TK-7417 Waste Water Storage Tank					8760 hr/yr (All Year)
EQT0124	E-7113A - E-7113A C3 Condenser - Area 1 Light Ends Column Vent					8760 hr/yr (All Year)
EQT0125	TK-7601A - TK-7601A "A" VCM Check Tank					8760 hr/yr (All Year)
EQT0126	74-06A - 74-06A Primary Incinerator		70 MM BTU/hr	70 MM BTU/hr		8760 hr/yr (All Year)
EQT0127	74-06B - 74-06B Secondary Incinerator		30 MM BTU/hr	30 MM BTU/hr		8760 hr/yr (All Year)
FUG0002	79-08 - VCM Plant - Fugitives					8760 hr/yr (All Year)
RLP0006	T-7240 - T-7240 Oxygen Based System Recycle Column Vents					8760 hr/yr (All Year)
RLP0007	T-7312 - T-7312 Oxygen Based System Ethylene Stripper Column Vents					8760 hr/yr (All Year)

## Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
<b>VCM-E Plant</b>							
EQT0012	00-05 - VCM Plant Cooling Tower pH Control Tank					10	
EQT0015	74-06 - VCM Plant - Vent Incinerator Scrubber	88.93	36516	3		126	155
EQT0016	74-07 - VCM Plant - EDC Cracking Fumace	17.2	16400	4.5		60	270
EQT0017	74-09 - VCM Plant - Decoking of EDC Cracking Fumace	55.6	2810	1		60	212
EQT0018	95-30 - VCM Plant Cooling Tower						59.3
EQT0024	98-10 - VCM Plant - Cl2 Destruct Cooling Tower						15.7
EQT0033	83-01 - VCM Plant - HCl Vent Tank Scrubber	103.1	19246	2		100	110
EQT0034	95-31 - VCM Plant Cooling Tower						59.3

## Relationships:

ID	Description	Relationship	ID	Description
EQT0097	V-7102A P.C. Column #2 Heavy End	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
EQT0098	E-7111A F.C. Column #3 Recovery Column	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
EQT0099	V-7101A F.C. Column #1 Light End Column	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
EQT0100	E-7102 A/B EDC Direct Chlorination Vent Condensers	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
EQT0101	V-7405 Steam Stripper Overhead Accumulators	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber

INVENTORIES

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## Relationships:

ID	Description	Relationship	ID	Description
ECT0102	V-7406 Steam Stripper Overhead Accumulators	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
EQT0103	TK-7609 A/B EDC Storage Tanks	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0104	TK-7611 A/B EDC Storage Tanks	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0105	TK-7613A EDC Storage Tanks	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0106	TK-7601B-D VCM Check Tanks VCM Storage Tanks	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0107	TK-7604A-B VCM Check Tanks VCM Storage Tanks	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0108	V-7204A VCM Dryers	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0109	V-7205A/B VCM Dryers	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0110	V-7107A Quench Column Recovery Pot	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0111	V-7108A Quench Column Recovery Pot	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0112	V-7201A Quench Column Accumulator	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0113	E-7206A VCM Column Condenser	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0114	TK-7412A Process Liquid Sphere	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0115	TK-7604C Process Liquid Sphere	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0116	T-10103 PVC Steam Stripper (Wet Vent)	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0117	C-10107 PVC Recovery Compressor (Dry Vent)	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0118	C-10104 PVC Gas Holder Recovery Compressor (Dry Vent)	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0119	E-10123 Recovery VCM Receiver Condenser (Dry Vent)	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0120	E-10129 Recovery VCM Receiver Condenser (Dry Vent)	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0121	E-10133 Recovery VCM Receiver Condenser (Dry Vent)	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0122	TK-5201 EDC Barge Loading Tank	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0123	TK-7417 Waste Water Storage Tank	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0124	E-7113A C3 Condenser - Area 1 Light Ends Column Vent	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0125	TK-7601A TA' VCM Check Tank	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0126	74-06A Primary Incinerator	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
ECT0127	74-06B Secondary Incinerator	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
RLP0006	T-7240 Oxygen Based System Recycle Column Vents	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber
RLP0007	T-7312 Oxygen Based System Ethylene Stripper Column Vents	Vents to	EQT0015	74-06 VCM Plant - Vent Incinerator Scrubber

## Subject Item Groups:

ID	Group Type	Group Description
UNF-0002	Unit or Facility Wide	VCM-E Plant - VCM-E Plant

## Group Membership:

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

INVENTORIES

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## Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multiplier	Units Of Measure
0620	Halogenated Hydrocarbons (Rated Capacity)		
SIC Codes:			MM Lb/Yr
2812	Alkalies and chlorine	AI1138	
2869	Industrial organic chemicals, nec	AI1138	